

are especially designed for easy and rapid fabrication. The finger protector 50 is snap fitted into the edge of the door and when in place, eliminates or greatly reduces the hazard or danger of a finger, toe or other elements being pinched, bruised, or cut during swinging movement of the door. A pair of inside and outside weatherstrip 56 and 70 provide for excellent weather sealing against air infiltration or water leakage. The finger protector is detachable to provide access to the hinges 14 for service as necessary, yet overall, the safety door entrance provides good security against unauthorized entrance from the outside when locked.

Referring now to FIG. 7, an alternate embodiment is shown and identical reference numerals are used to describe parts or components similar or identical to those of the previously described embodiment. Those elements differing significantly in the alternate embodiment are provided with reference numbers having a suffix "A" to distinguish them from the prior counterparts.

The embodiment of the invention shown in FIG. 7 is generally similar in operation and function to the embodiment of FIGS. 1 through 6 except that a modified finger protector 50A does not include a planar wall segment and the outer surface of the large curved segment 52 thereof conforms entirely to a segment of cylindrical surface having an axis of generation coincident with the hinge axis "A-A". A modified web 58A is provided with an angularly offset portion 61 integrally joined with the inside of the curved segment 52 and a wall 60A of the hinge stile 30A of the door 12A is formed with a recessed offset portion 67 facing the offset portion 61 in order to accommodate a rib 68 of the protector. A rib section 66A along the opposite edge of the web 58A extends toward the internal rib 72 of the jamb 16A and has an outwardly facing groove, provided therein for supporting the outside weatherstrip 70. The outside weatherstrip bears against and seals between the inside surface of the outer sight line wall 44 and the adjacent inside surface of a rib portion 62 on the door stile 30A across the gap G-1 as illustrated.

A modified form of door stop 48A is provided in a glazing pocket 98A and the pocket includes an angularly offset side wall portion 89 for receiving a self-tapping fastener 105 for holding the door stop in place. One leg 104 of the modified door stop includes a rib 104a at the outer free edge which is seated within a pocket formed by a rib 91 on the modified web 90A of the jamb member 16A. The modified finger protector 50A thus presents a slightly larger diameter, continuous cylindrical surface segment 52 which bears against the deflectable sealing element of the inside weatherstrip 56 with a substantially even or constant amount of sealing force throughout the entire opening or swinging movement of the door between its closed and open positions.

Although the present invention has been described with reference to several illustrated embodiments thereof, it should be understood that numerous other modifications and embodiments can be devised by those skilled in the art that will fall within the spirit and scope of the principles of this invention.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. In combination, a door having opposite faces and a hinge stile element along one edge thereof, a door jamb element adjacent said hinge stile element, and hinge means interconnecting said elements for supporting said

door for pivotal movement about a hinge axis parallel of said elements to swing between a closed and an open position wherein a corner edge of said door on one face thereof moves between corresponding positions closely adjacent said jamb element and spaced apart from said jamb forming a gap between said corner and jamb element,

a finger protector secured on one of said elements to extend between facing portions thereof including a curved wall surface for continuously bridging said gap while said door swings between said open and closed positions,

the other of said elements including a pocket for receiving said finger protector when said door is closed, and

a pair of spaced apart weatherstrip means between said elements, one of said weatherstrip means mounted to provide a seal between said curved wall surface of said finger protector and said other element and the other of said weatherstrip means mounted to provide a seal between said elements adjacent a door face opposite from the door face adjacent said curved wall surface of said finger protector.

2. The combination of claim 1 wherein said finger protector includes a wall surface adjoining said curved wall surface sloped to move away from said one weatherstrip means as said door swings from said closed position toward said open position.

3. The combination of claim 1 wherein said curved wall surface of said finger protector comprises an arcuate portion of a cylindrical surface coaxially aligned with said hinge axis.

4. The combination of claim 1 wherein said hinge means includes at least one pair of pivotally interconnected hinge leafs connected to said respective elements and extending between facing portions thereof.

5. The combination of claim 4 wherein said curved wall surface of said finger protector is in enclosing covering relation over said hinge leafs.

6. The combination of claim 4 wherein said finger protector includes a portion notched to accommodate at least one hinge leaf and prevent longitudinal movement with respect thereto.

7. The combination of claim 1 wherein said finger protector and said one of said elements include connector means for detachably mounting said finger protector on said one element.

8. The combination of claim 7 wherein said connector means includes at least one deflectable rib and groove means for receiving said rib.

9. The combination of claim 8 wherein said finger protector includes a pair of said deflectable ribs and said one element includes said groove means.

10. The combination of claim 9 wherein said groove means is formed on said hinge stile.

11. The combination of claim 9 wherein said hinge stile of said door comprises a tubular member having a wall forming a bottom of said groove facing said jamb element pocket, said stile includes a pair of opposite face walls having rib portions projecting beyond said bottom wall of said groove toward said jamb and said ribs of said finger protector engaging said rib portions to secure said protector on said door.

12. The combination of claim 11 wherein said rib portions and said ribs are shaped so that said finger protector is snapped into secured engagement on said